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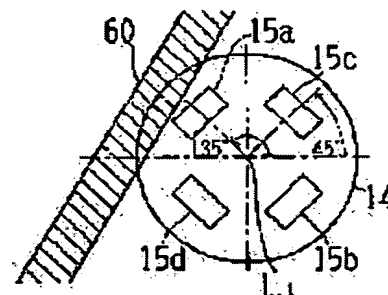
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## (54) MEASURING DEVICE FOR OCULAR REFRACTIVITY

## (57)Abstract:

PROBLEM TO BE SOLVED: To get an ocular refractivity base on a higher accurate phase difference method and easily discover the presence or absence of irregular astigmatism.

SOLUTION: The directional slit-like light fluxes are scanned and projected in the examined eyeground and the slit light flux reflected from the eyeground is detected by a pair of light receiving elements 15a, 15b and a pair of light receiving elements 15c, 15d disposed symmetrically about the optical axis in the position approximately conjugate with the cornea of the examined eye. When a first directional slit light flux is projected on the examined eye having no astigmatism, the light receiving elements 15a, 15b are arranged correspondingly to the direction orthogonal to the longitudinal direction of the slit light flux and then the center of the cornea or the center of visual axis is detected on the basis of the phase difference signal output. A refractive power in the position of the cornea corresponding to the position of the respective light receiving elements is obtained on the basis of the respective output signals of the light receiving elements 15a, 15b arranged correspondingly to the direction of the center of the cornea or the center of visual axis and the first direction. Thus, the refractive power in the longitudinal direction to the center of the cornea or the center of the visual axis is obtained to detect the presence or absence of irregular astigmatism.



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